AVR4 Series

Electrically Heated, Vaporizing Pressure Regulator
Pressure Reducing, Stainless Steel

Value Proposition:

The AVR4 Series regulator is designed to heat and/or vaporize a gas or liquid sample before entering an analyzer system.

This unique design allows the user to disassemble the regulator and heat transfer components for complete cleaning and repair of the unit, thus reducing expensive replacement costs and down time.

Contact Information:

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Product Features:

- Ultra low internal volume
- CSA, CE-ATEX certified
- Cleaned for O_2 service is standard
- Convoluted Hastelloy C-22® diaphragm for superior strength and corrosion resistance provides outlet pressure stability with changes in flow
- Field serviceable heat transfer element
- TCO (Thermal cut-out) is standard for all heat ranges
- Integral diaphragm stop provides additional measure of safety
- Express Service Program available noted *green italic print*

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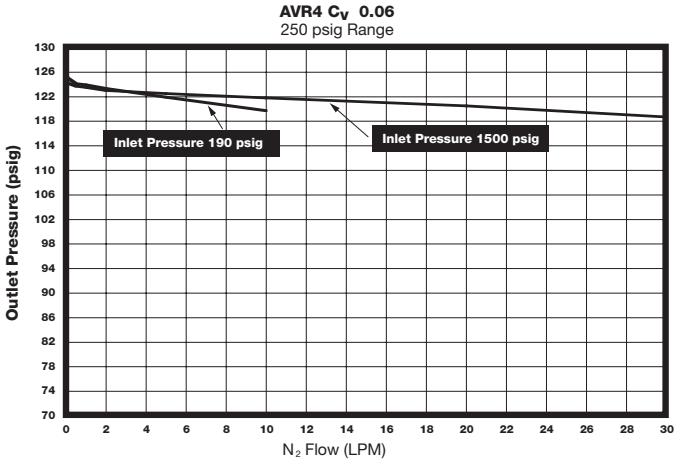
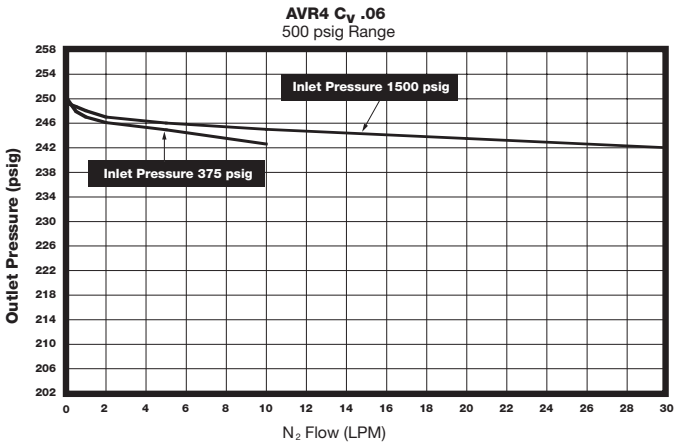
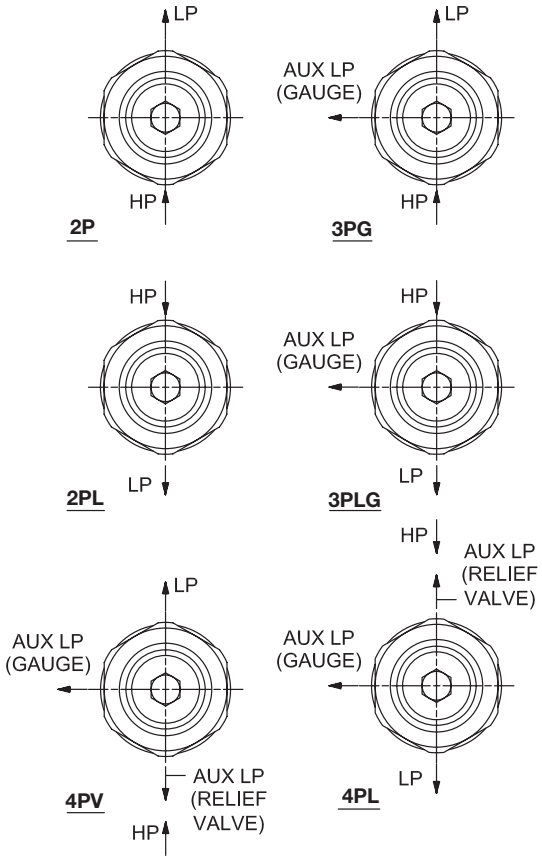
AVR4 Series

Flow Curves



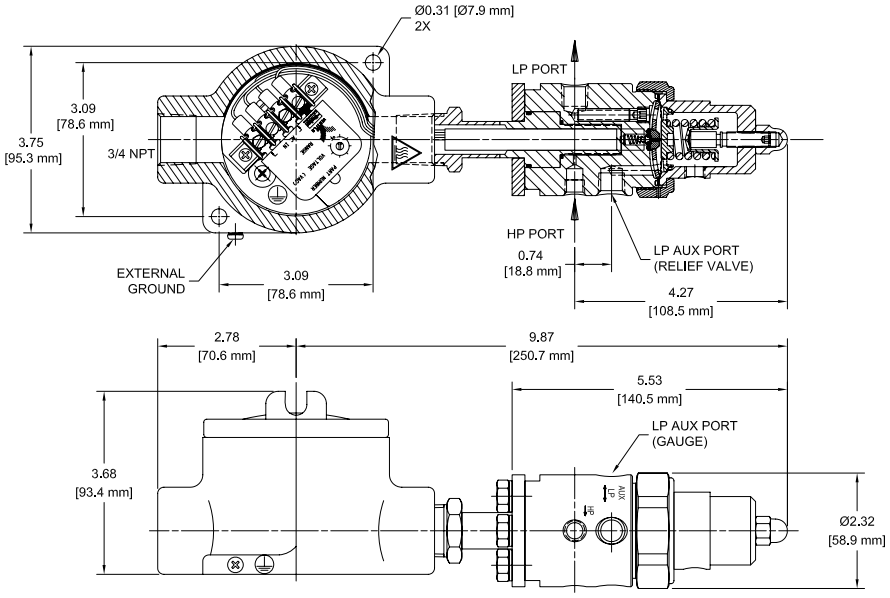


Porting Configurations



ATEX Related Drawing:
Revision Control Per 54099313
Reference: ATEX Schedule Drawing 54013150
Reference: CSA File # LR99181

Dimensional Drawing



Safety Guide and Installation and Operating Instructions available at
www.parker.com/veriflo

AVR4 Series

Ordering Information

Build an AVR4 Series regulator by replacing the numbered symbols with an option from the corresponding tables below.

Color Explanations: Black = Standard Lead Time Configurations
Blue = Extended Lead Time Configurations
Green Italic = Express Service Program (ESP)

For an explanation of Ordering options please reference literature 25000275 at www.parker.com/veriflo

	1	2	3	4	5	6	7	8	9
Sample: **AVR4**	**S**	**K**	**1**	**120**	**D**	**L**	**X**	**3PG**	**RV**

Finished Order: **AVR4SK1120DLX3PGRV**

1 Body Material

S = 316L Stainless Steel
H = Hastelloy C-22®
M = Monel®

2 Seat Material

K = PCTFE
P = PEEK™
V = Vespel®

3 Pressure Range

0 = 0 - 10 psig (max inlet 250 psig)
1 = 1 - 30 psig
2 = 2 - 60 psig
3 = 3 - 100 psig
4 = 10 - 250 psig
5 = 20 - 500 psig

4 Voltage

120 = 120V
240 = 240V

5 Heater Wattage

A = 40
C = 100
D = 150
E = 200

6 Temperature Controller

L = 75°F to 220°F 24°C - 104°C
H = 220°F to 380°F 104°C - 193°C

7 Outlet Gauge

03 = 0 - 30 psig
OL = 0 - 60 psig
01 = 0 - 100 psig
4 = 0 - 400 psig
6 = 0 - 600 psig
X = No Gauge

8 Porting Configuration

blank = 2 Port
2PL = 2 Port *Reverse Entry*
3PG = 3 Port Relief Valve or Gauge Port
3PLG = 3 Port *Reverse Entry Relief Valve or Gauge Port*
4PV = 4 Port Relief Valve and Gauge Port
4PL = 4 Port *Reverse Entry Relief Valve and Gauge Port*

High Pressure port standard is 1/8" NPT Female. 1/4" NPT Female on auxillary outlet ports.

9 Optional Features

RV = Relief Valve
SL1 = SilcoNert™ 1000 *Coating on wetted metallic components only. Does not include gauges or relief valves.*

Additional configurations available upon request

Note: Veriflo reserves the right to plug NPT ports. If a true ported body is required, please contact Customer Service.

Product Certifications	
North American Certification	CLASS I GROUPS A,B,C & D LR99181
European Union Certification	0344 II 2 G ExdIIC T3 KEMA 03ATEX2359

AVR4 Series

Specifications

Materials of Construction	
Wetted	
Body Options	316L Stainless Steel (std), Monel® or Hastelloy C-22®
Compression Member	Inconel® 625
Diaphragm	Hastelloy C-22®
Poppet	Hastelloy C-276®
Poppet Spring	Inconel® X750
Seat Options	PCTFE (std), PEEK™ or Vespel®
Carrier Options	316L Stainless Steel (std) or Hastelloy C-22®
Heater Seal	PEEK™
O-ring Back-up	FKM
Non-wetted	
Cap	303 Stainless Steel
Nut	316L Stainless Steel
Condulet	Cast Iron Alloy and Aluminum
Operating Conditions	
Maximum Inlet	3,500 psig (241 barg) or 250 psig (17.2 barg) for 10 psig range
Outlet Options	0-10 psig (0.7 barg), 1-30 psig (2 barg), 2-60 psig (4 barg), 3-100 psig (7 barg), 10-250 psig (17 barg), 20-500 psig (35 barg)
Temperature	*based upon seat option*
PCTFE	150°F (66°C)
PEEK™	275°F (135°C)
Vespel®	500°F (260°C)
Ambient Temperature	-4°F to +104°F (-20°C to +40°C)

Functional Performance	
Design	
Burst Pressure	10,500 psig (724 barg)
Proof Pressure	5,250 psig (362 barg)
Flow Capacity	C_V 0.06 Nominal
Leak Rate	
Internal	Bubble Tight
External	Bubble Tight
Internal Volume	
High Pressure Inlet	0.57 cc
Overall	4.6 cc
Approx. Weight	8 lbs. (2.0 kg)
Electrical Specifications	
Power Requirements	120V or 240V, 50/60 Hz
Heater Wattage	40, 100, 150 or 200 watt
Temperature Controller *(Proportional)*	75°F to 220°F or 215°F to 380°F (24°C to 105°C or 102°C to 194°C) *Ranges are approximate*
Condulet	Crouse Hinds, UL and CSA listed Class 1, Groups A, B, C, D; Class 2, Groups E, F, G

For additional information on materials of construction, functional performance and operating conditions, see Regulator Technical Bulletin.

Use mobile device to scan this QR Code.

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